



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2022-0678; Project Identifier MCAI-2022-00067-T; Amendment 39-22147; AD 2022-17-09]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus SAS Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2021-16-03, which applied to certain Airbus SAS Model A350-941 and -1041 airplanes. AD 2021-16-03 required an inspection for missing or incorrect application of the lightning strike edge glow sealant protection at certain locations in the wing tanks, and corrective action. This AD was prompted by in-production findings of missing or incorrect application of the lightning strike edge glow sealant protection at specific locations in the wing tanks and by the development of a modification to restore two independent layers of lightning strike protection on the wing upper cover. This AD continues to require the actions of AD 2021-16-03 and requires a modification to restore two independent layers of lightning strike protection, as specified in a European Union Aviation Safety Agency (EASA), which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For material incorporated by reference (IBR) in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0678.

### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0678; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Dan Rodina, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 206-231-3225; email [dan.rodina@faa.gov](mailto:dan.rodina@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Background**

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2022-0011, dated January 21, 2022 (EASA AD 2022-0011)

(also referred to as the MCAI), to correct an unsafe condition for certain Airbus SAS Model A350-941 and -1041 airplanes.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2021-16-03, Amendment 39-21665 (86 FR 47555, August 26, 2021) (AD 2021-16-03). AD 2021-16-03 applied to certain Airbus SAS Model A350-941 and -1041 airplanes. The NPRM published in the *Federal Register* on June 16, 2022 (87 FR 36276). The NPRM was prompted by in-production findings of missing or incorrect application of the lightning strike edge glow sealant protection at specific locations in the wing tanks and by the development of a modification to restore two independent layers of lightning strike protection on the wing upper cover. The NPRM proposed to continue to require the actions of AD 2021-16-03 and to require a modification to restore two independent layers of lightning strike protection, as specified in EASA AD 2022-0011.

The FAA is issuing this AD to address missing or incorrectly applied sealant, which in combination with an undetected incorrect installation of an adjacent fastener and a lightning strike in the immediate area, could result in ignition of the fuel-air mixture inside the affected fuel tanks and loss of the airplane. See the MCAI for additional background information.

## **Discussion of Final Airworthiness Directive**

### **Comments**

The FAA received a comment from the Air Line Pilots Association, International (ALPA), who supported the NPRM without change.

### **Conclusion**

The FAA reviewed the relevant data, considered the comment received, and determined that air safety requires adopting this AD as proposed. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will

increase the economic burden on any operator. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products.

### **Related Service Information under 1 CFR Part 51**

EASA AD 2022-0011 specifies procedures for an inspection for missing or incorrect application of the lightning strike edge glow sealant protection at certain locations in the wing tanks (discrepancies), and corrective action. Corrective actions include applying sealant in areas where sealant was found to be missing or incorrectly applied. EASA AD 2022-0011 also specifies procedures for a modification to restore two independent layers of lightning strike protection on the wing upper cover.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

The FAA estimates that this AD affects 27 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

#### **Estimated costs for required actions**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Retained actions from AD 2021-16-03	Up to 67 work-hours X \$85 per hour = \$5,695	\$0	Up to \$5,695	Up to \$153,765
New actions (modification)	Up to 55 work-hours X \$85 per hour = \$4,675	Up to \$500	Up to \$5,175	Up to \$139,725

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. The FAA has no way of determining the number of aircraft that might need these on-condition actions:

### Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
1 work-hour X \$85 per hour = \$85	\$0	\$85

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all known costs in the cost estimate.

#### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive (AD) 2021-16-03, Amendment 39-21665 (86 FR 47555, August 26, 2021); and

b. Adding the following new AD:

**2022-17-09 Airbus SAS:** Amendment 39-22147; Docket No. FAA-2022-0678; Project Identifier MCAI-2022-00067-T.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD replaces AD 2021-16-03, Amendment 39-21665 (86 FR 47555, August 26, 2021) (AD 2021-16-03).

**(c) Applicability**

This AD applies to Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2022-0011, dated January 21, 2022 (EASA AD 2022-0011).

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings.

**(e) Unsafe Condition**

This AD was prompted by in-production findings of missing or incorrect application of the lightning strike edge glow sealant protection at specific locations in the wing tanks and by the development of a modification to restore two independent layers of lightning strike protection on the wing upper cover. The FAA is issuing this AD to address missing or incorrectly applied sealant, which in combination with an undetected incorrect installation of an adjacent fastener and a lightning strike in the immediate area, could result in ignition of the fuel-air mixture inside the affected fuel tanks and loss of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2022-0011.

**(h) Exceptions to EASA AD 2022-0011**

(1) Where EASA AD 2022-0011 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2022-0011 refers to October 27, 2020 (the effective date of EASA AD 2020-0220), this AD requires using September 30, 2021 (the effective date of AD 2021-16-03).

(3) Where paragraph (1) of EASA AD 2022-0011 gives a compliance time of “the next scheduled maintenance tank entry, or before exceeding 78 months since Airbus date of manufacture, whichever occurs first after 27 October 2020 [the effective date of EASA AD 2020-0220],” for this AD, the compliance time is the later of the times specified in paragraphs (h)(3)(i) and (ii) of this AD.

(i) The next scheduled maintenance tank entry, or before exceeding 78 months since Airbus date of manufacture, whichever occurs first after September 30, 2021 (the effective date of AD 2021-16-03).

(ii) Within 12 months after September 30, 2021 (the effective date of AD 2021-16-03).

(4) Where paragraph (2) of EASA AD 2022-0011 refers to “discrepancies,” for this AD, discrepancies include missing or incorrectly applied sealant.

(5) Where paragraph (3) of EASA AD 2022-0011 gives a compliance time of “the next scheduled maintenance tank entry, or before exceeding 78 months since Airbus date of manufacture, whichever occurs first after the effective date of this [EASA] AD,” for this AD, the compliance time is the later of the times specified in paragraphs (h)(5)(i) and (ii) of this AD.

(i) The next scheduled maintenance tank entry, or before exceeding 78 months since Airbus date of manufacture, whichever occurs first after the effective date of this AD.

(ii) Within 12 months after the effective date of this AD.

(6) The “Remarks” section of EASA AD 2022-0011 does not apply to this AD.

**(i) Additional AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for



this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: Except as required by paragraph (i)(2) of this AD, if any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(j) Related Information**

For more information about this AD, contact Dan Rodina, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 206-231-3225; email dan.rodina@faa.gov.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2022-0011, dated January 21, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0011, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on August 10, 2022.

Christina Underwood, Acting Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

